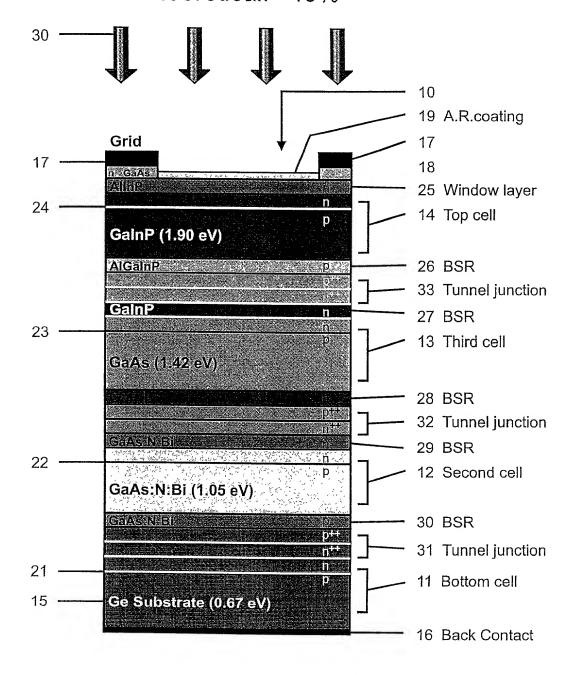
Penultimate Solar Cell

AM1 Efficiency Theoretical: 40%



<u>FIG. 1</u>

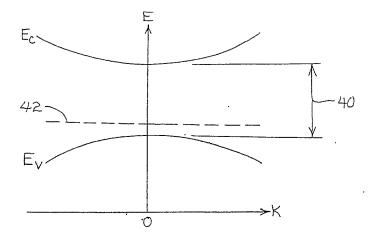


FIG. 2 (Prior Art)

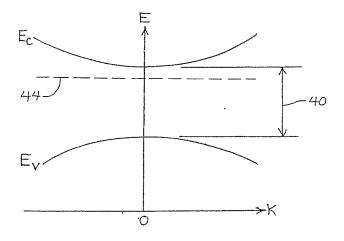


FIG. 3 (Prior Art)

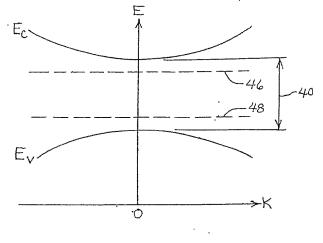


FIG. 4

Ultimate Solar Cells

AM1 Efficiency
Theoretical: 36%



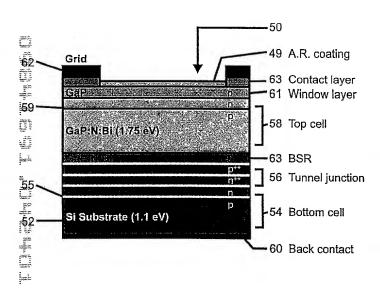


FIG. 5

AM1 Efficiency
Theoretical: 40%



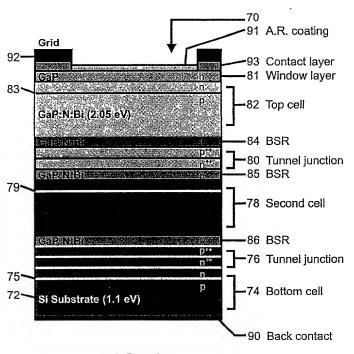
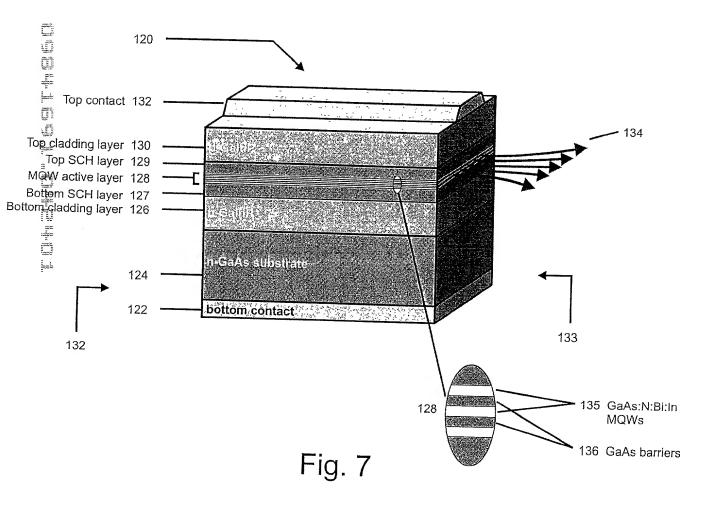


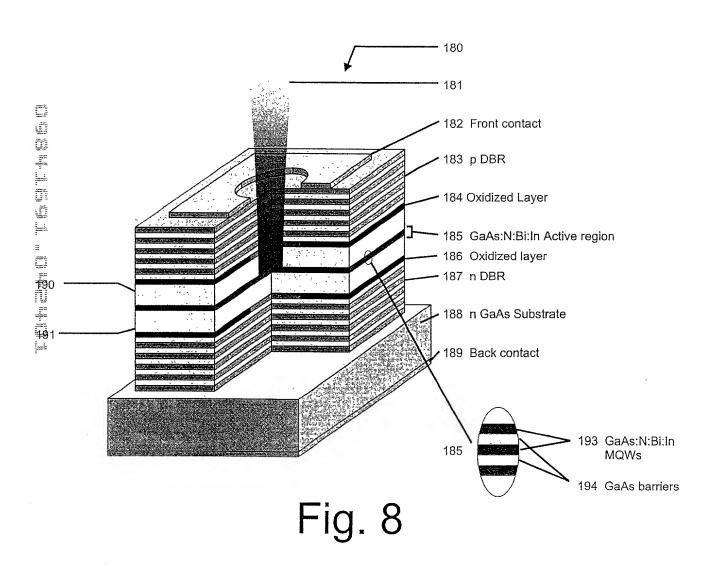
FIG. 6

GaAs-based Edge-Emitting Lasers

1.55 or 1.3 µm wavelength



VCSEL Lasers for 1.3 or 1.55 μm



High Brightness LEDs

Red / NIR LEDs: 640-800 nm

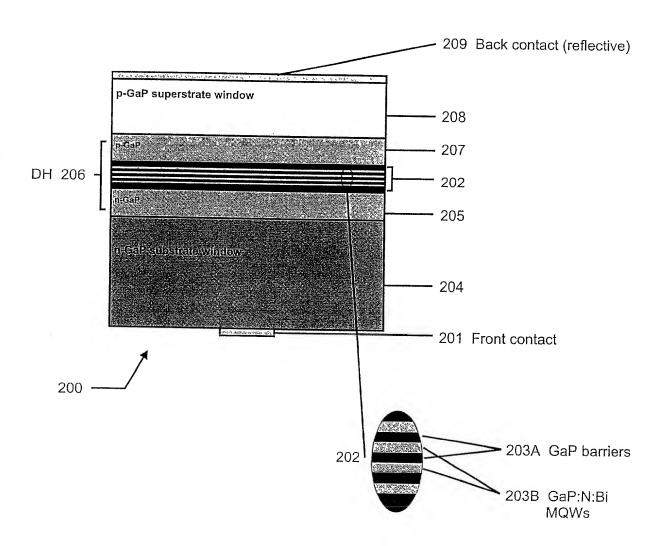


Fig. 9

Silicon monolithic LEDs

Red / NIR LEDs: 640-800 nm

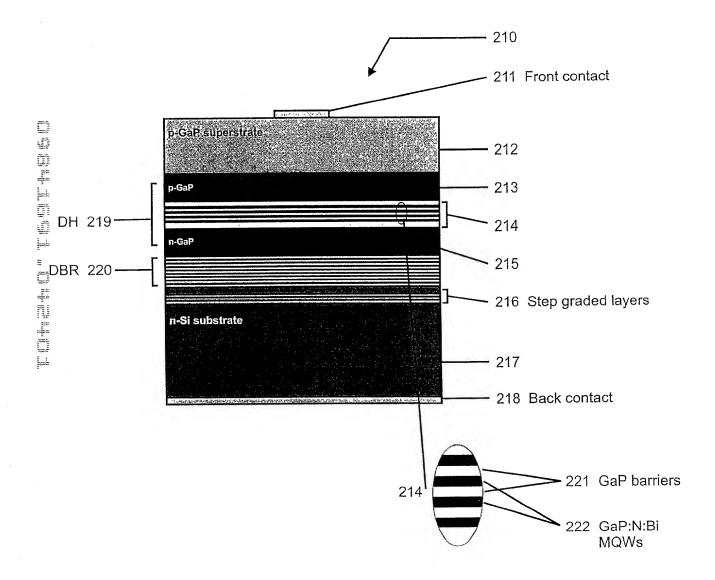


Fig. 10

GaP based Edge-Emitting Lasers

640 - 800 nm wavelength

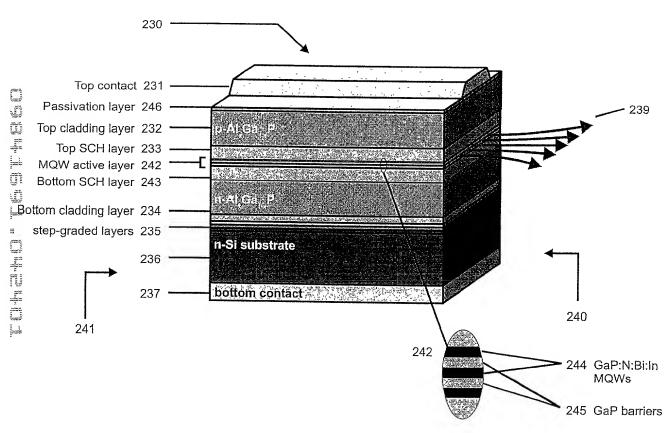


Fig. 11

Thermo Photovoltaic Solar Cell

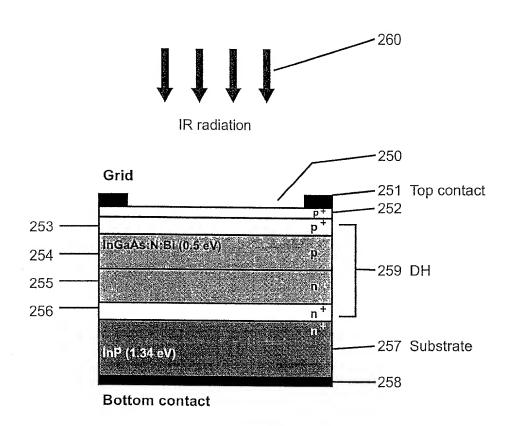


Fig. 12

Photodetectors

for 1.3 or 1.55 μm wavelengths

Light signals

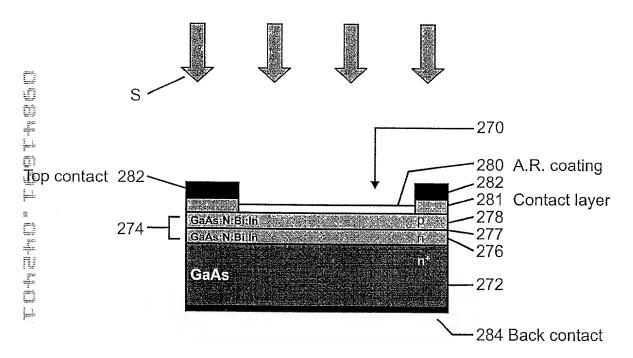


Fig. 13